(12) **United States Patent**
Wang et al.

(10) **Patent No.:** **US 9,104,277 B2**
(45) **Date of Patent:** **Aug. 11, 2015**

(54) **SENSING METHOD AND CALIBRATION METHOD FOR A CAPACITIVE TOUCH PANEL**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 775 days.

(21) Appl. No.: **12/946,230**

(22) Filed: **Nov. 15, 2010**

(65) **Prior Publication Data**

US 2011/0115743 A1   May 19, 2011

(30) **Foreign Application Priority Data**

Nov. 19, 2009   (TW) .... 098139327 A

(51) **Int. Cl.**
  G06F 3/041   (2006.01)
  G06F 3/044   (2006.01)
(52) **U.S. Cl.**
  CPC ***G06F 3/044*** (2013.01)
(58) **Field of Classification Search**
  CPC G06F 3/044; G06F 3/0418
  USPC 345/173, 178
  See application file for complete search history.

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(57)   **ABSTRACT**

Stimulus regions are defined based on the traces of a capacitive touch panel. A first signal is applied to a first trace in a first direction under a second signal applied to a second trace in a second direction to stimulate the second trace, to sense a stimulus region for an ADC value thereof. Calibration parameters for the traces are determined according to the ADC values of the traces without being touched, and are stored for later sensing the traces for position calculation and multi-finger calculation.
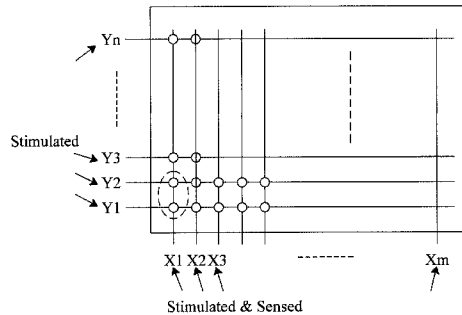
74 Claims, 14 Drawing Sheets

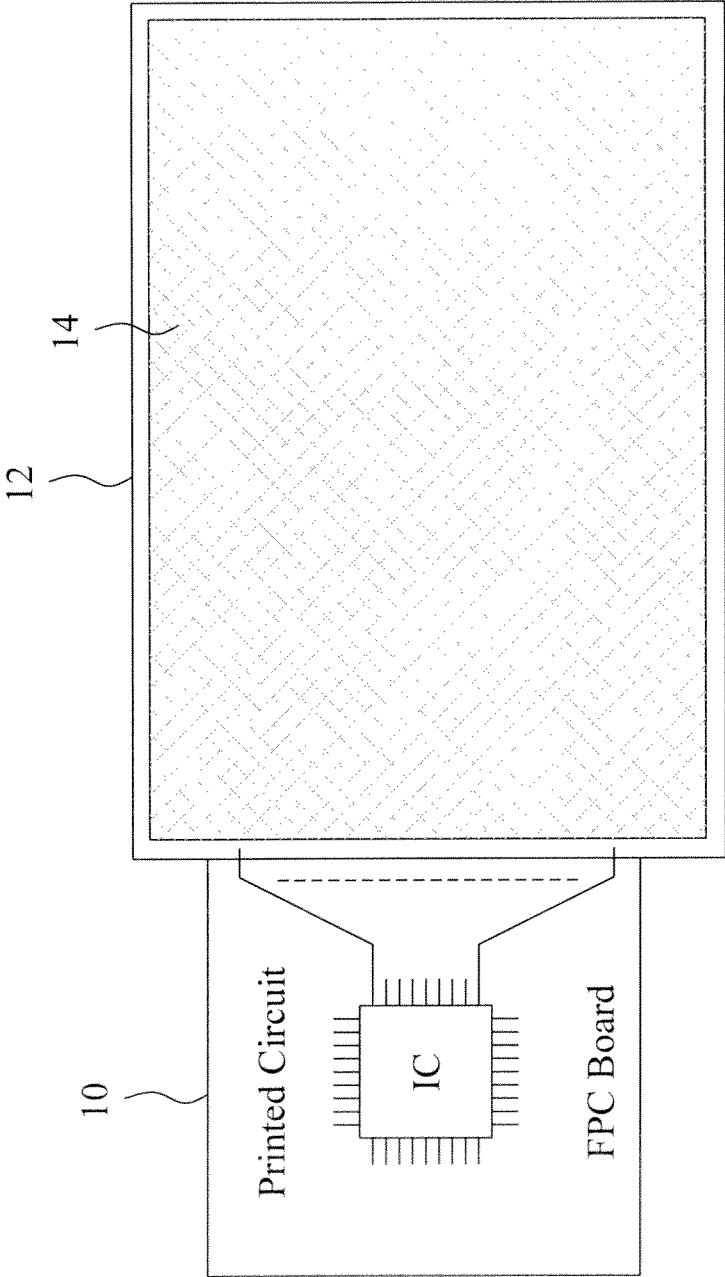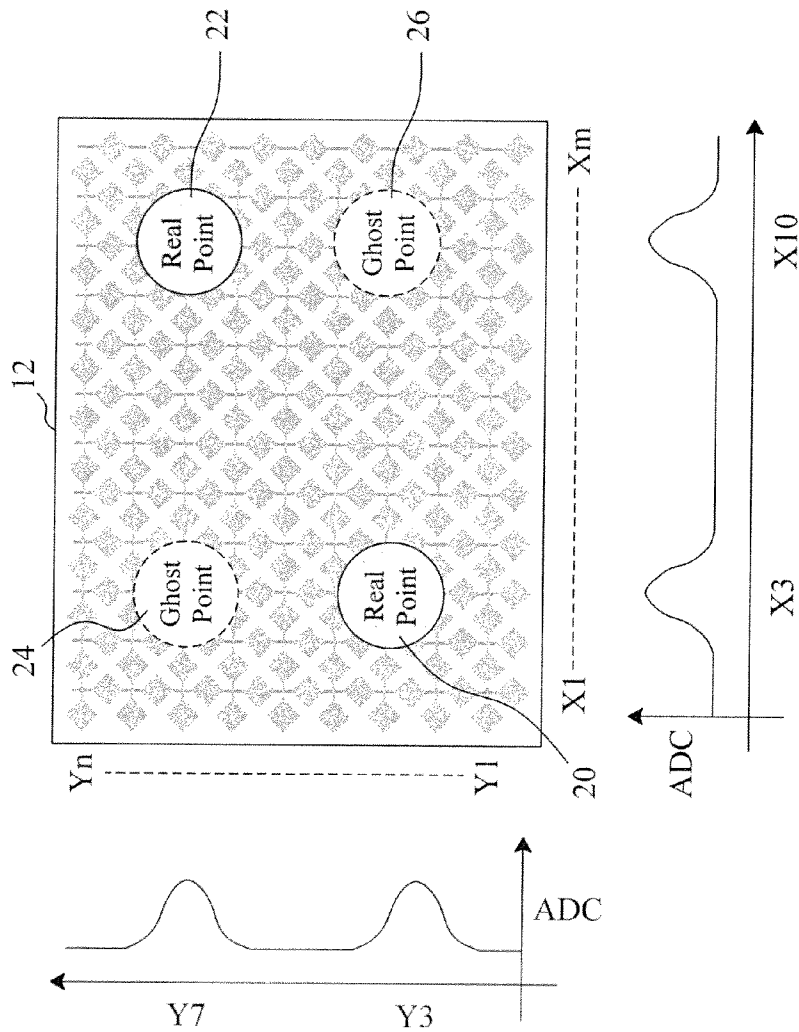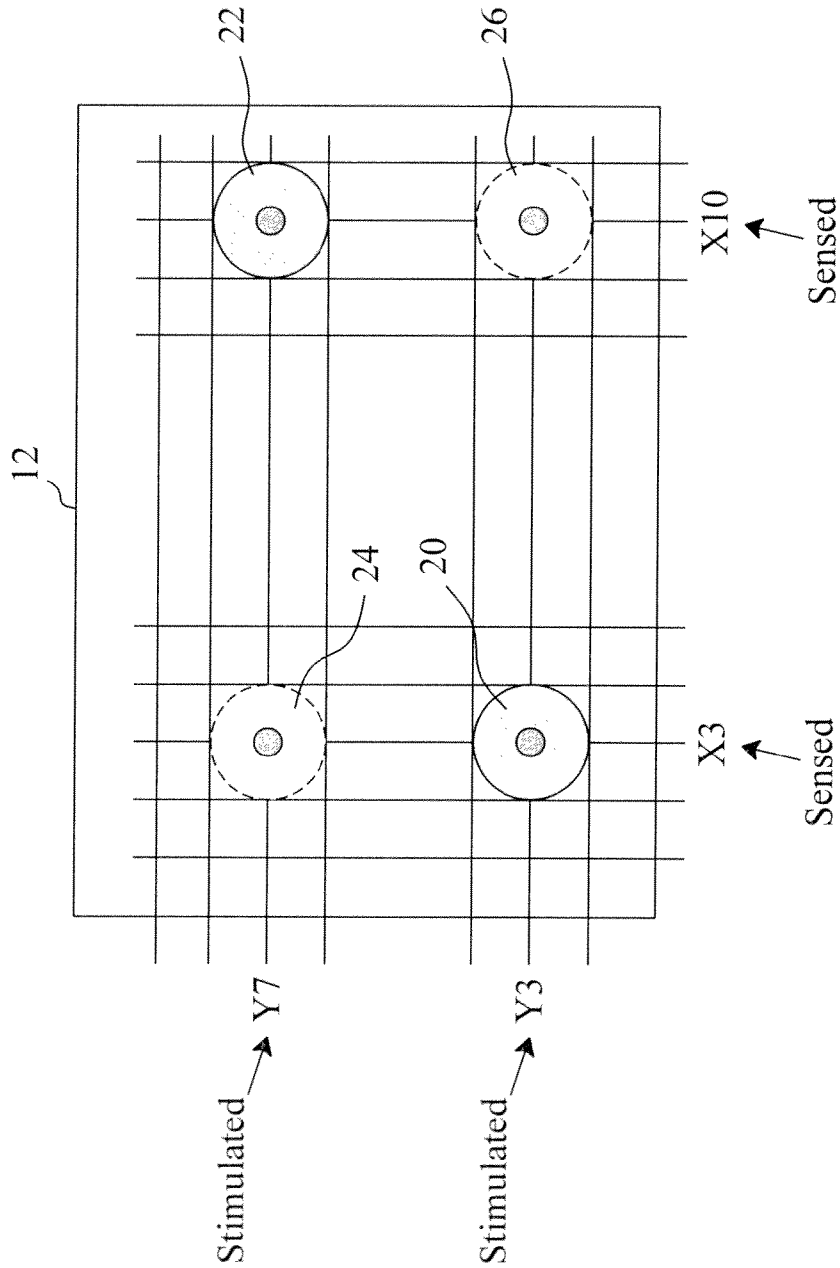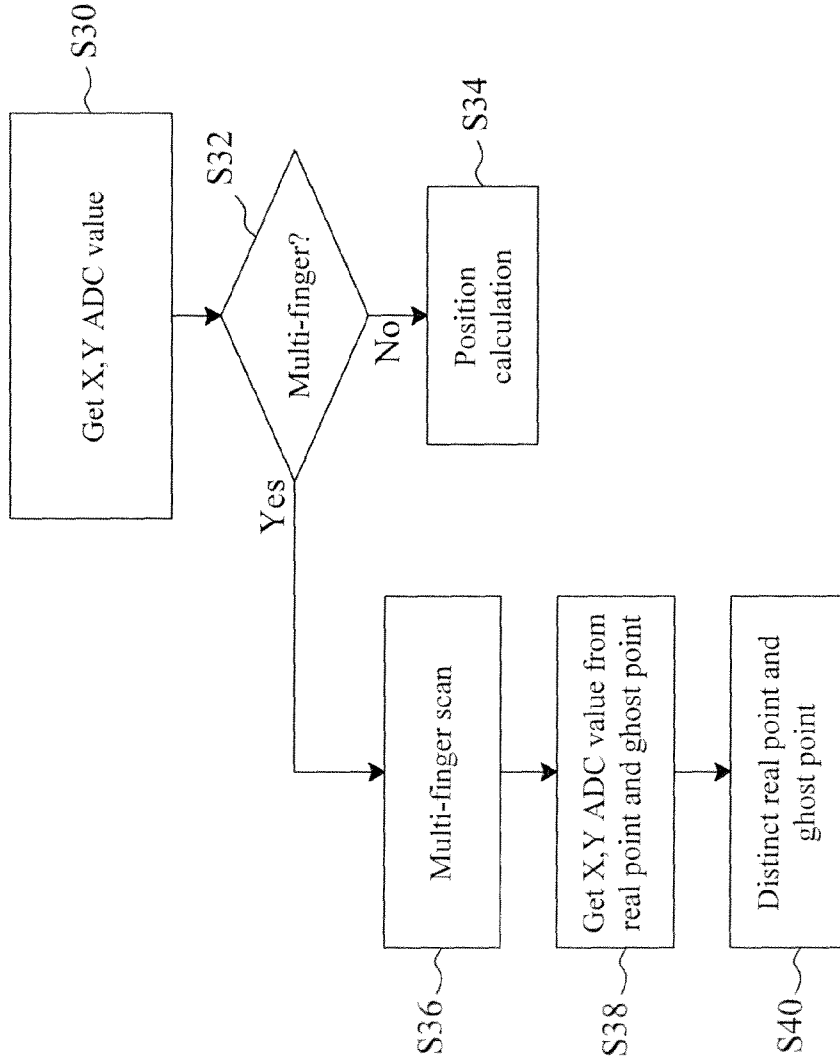| Stimulated & Sensed	Stimulated
X1	Y1 or Y1,Y2 or Y1,Y2,Y3 ⋮ or Y1,Y2,Y3...Yn
X1,X2	"
X1,X3	"
⋮	⋮
X1,X2,X3...Xm	"

Fig. 1
Prior Art

Fig. 2
Prior Art

Fig. 3
Prior Art

Fig. 4
Prior Art

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